



# FEMA

## *Thrice Hit Learning From Others' Experience*

**Moore Haven, FL** – When Hurricane Wilma crossed Glades County on Oct. 24, 2005, tropical winds met with cold air masses and intensified the storm. The unusual weather phenomenon caused Wilma to batter the county with winds in excess of 100 mph for a continuous 42 minutes—without the normal calm that occurs when the eye passes. With the damage incurred during previous hurricanes, officials wondered how the facilities would look when they surveyed the grounds.

Fortunately for Glades County families, school district leaders had already implemented damage-reduction measures they learned from nearby schools and county neighbors. Their preemptive actions ultimately allowed students to return to class in one week, even though the roofs of 17 school district buildings sustained damage during the hurricane.

After finishing emergency work, the school district's recovery strategy turned to permanent repairs. School leaders looked at ways to significantly decrease the time needed to complete permanent repairs. They found that having an architect create design documents on all damaged facilities expedited the rebuilding process. Contractors could use building specifications listed in the documents to develop their bids and speed up reconstruction.

Another lesson Glades school administrators learned was the benefit of installing poured concrete portable classrooms instead of traditional ones. The positive feedback came from many South Florida school districts forced to use temporary classrooms after the 2004 hurricanes.

Consequently, Glades school administrators switched from the traditional, manufactured-home-type models to the concrete, portable, stand-alone classrooms. The fortified units have linked, poured concrete walls that are tied to a secured foundation.

One of Glades' concrete portables was installed the week prior to Wilma's landfall. Though subjected to the same winds as the rest of the facilities, the concrete portable unit sustained minor damage to only one corner of the metal roof. The rest of the building was untouched.

Since the school district also suffered a great deal of roof damage during the last two hurricane seasons, Bass sought improvement ideas from members of an insurance consortium. The group agreed that fewer standing-seam roofs suffered damage in Charlotte County after Hurricane Charley's Category 4 winds.

In another improvement effort, the school district designed two new schools in the western part of the county to meet Enhanced Hurricane Protection Area standards, which exceed the sustained wind load requirements for the area by 40 mph.

The many lessons learned by collaborating with neighboring school districts and organizations provided insight into how to respond to the \$6.9 million in damage sustained by the Glades County School District after Hurricane Wilma, including how to rebuild.



Glades County,  
Florida



### Quick Facts

Sector:

**Public**

Cost:

**\$6,900,000.00 (Estimated)**

Primary Activity/Project:

**Retrofitting, Structural**

Primary Funding:

**Local Sources**